Faculty Development Plan

July 23, 2016

1 Introduction

This document contains details associated with the faculty development plan which is part of the faculty development series. Very broadly speaking, my career goal is to reach my potential as an academic (in terms of both teaching and research). Reaching this goal will be possible if I continue to be an active participant in cutting edge statistical methodological research and continually look for ways to improve my teaching abilities. The specifics to reach this goal are provided in the next sections.

2 Scholarship

For me, being a good scholar implies being an active member of the scientific (in my case the statistical) community. This obviously requires publishing good research articles. That said, I also believe being a good scholar implies being productive in an ethical way by maintaining ones integrity.

My general research focus is on applied (non)parametric Bayesian modeling. I develop statistical methodologies that address a particular statistical (or scientific) question. In the past two years I have dedicated quite a bit of time thinking about product partition models and have published two papers in the area. I have three applied areas of interest, human performance, sports, and education. I have published methodological papers in all three areas.

I plan on continuing my work in product partition models and fostering a productive collaboration with Fernando Quintana of Chile. I also hope to continue working with collaborators from Chile on education research (particularly dynamic value-added models). Also, because I am naturally curious my interest is easily piqued and I plan to always be open to exploring new and interesting areas of research.

2.1 Self-assessment

In terms of possessing a natural statistical intuition upon being exposed to a problem, I am average at best. However, after carefully exploring procedures I am able to build statistical intuition and identify non obvious short comings or utility of statistical models. I am a fairly careful statistical thinker and can push ideas forward. That said, on occasion I get hung up on details and lose focus of big picture implications. I am becoming a better writer that can explain technical statistical procedures in an appealing way. I get distracted too easy. I need to be more efficient using time and pushing projects forward with out getting stuck on small details. To improve in these areas, I am continually tinkering with daily schedule and goals to find what works best for me.

2.2 Professional Goals

My principal scholarship goal is to publish two statistics papers a year. To do this, I need to consistently have at least two statistics methodology papers in the publication pipeline. Also, having regular external funding will help keep ideas focused and moving forward. Currently, I have two papers that are in the revision stage and two others that can realistically be submitted in the next two months. To maintain this pace in the not too distant future, I plan to carry out the following

- Continue to foster a potential collaboration with members of the human performance department at BYU by submitting an NIH grant proposal by this October.

- Maintain the productive collaboration I have formed with Fernando Quintana by submitting two papers together by the end of the year. Begin brain-storming idea of extending spatial product partition models to the spatial-temporal case.

- Foster collaboration with Chilean researchers in education studies by identifying and applying for education grants that are international in flavor. Continue working on time dependent value added models. Submit paper within the next 6-8 months.

Apart from producing publications and applying for grants, I hope to be a contributing member of Bayesian statistics community by seeking out opportunities to participate in international societies and always accepting opportunities to be a journal reviewer.

3 Teaching

Teaching is important to me. My hope is that this is reflected in the lectures that I give.

3.1 Self-assessment

I am an ok instructor. I believe that I am able to construct a fairly coherent lecture and deliver it in a way that is not too boring. I show students respect and try accommodate student's needs so long as I am reasonably confident that all students get equal opportunities. I am not good at assessing learning. I use same techniques and similar materials as those that I was exposed to as a student. I can sometimes generate discussion, but get antsy after only a few seconds of silence. I am not good at thinking out of the box and coming up with fresh ways of presenting material.

3.2 Goals

To improve my teaching ability I hope to do the following within the next year

- Attend a lecture or two of colleagues that have been recognized as good teachers.

- Invite a few colleagues to my lectures with the hopes of getting some constructive feed back on obvious things that will improve instruction.

- Read one book about being an effective teacher and in particular being able to assess understanding and learning.

4 Citizenship

With in the university I feel that being a good team player is important. Within the statistics community it is important to The same can be said

4.1 Self-assessment

I am not a jerk. I will rarely say no to a request. That said, I tend to shut myself in my office and it is possible that I have little interaction with members of BYU community through the course of a day.

4.2 Goals

To be a good citizen of the statistics department I plan to do the following

- Be an active participant in faculty meetings and other department activities.

- Willing accept duties assigned to me by the department chair.

- Be a team player by volunteering research and/or teaching material that might benefit colleagues.

- Interact pleasantly with other members of the department and staff.